

### ABSTRACT

The invention relates to apparatus and method for ultrasonically and electromagnetically treating tissue to treat, for example, traumatized tissue or a bone injury. The apparatus includes at least one ultrasonic transducer assembly and at least one electromagnetic coil assembly configured to cooperate with a placement module for placement in proximity to the treatment area. The apparatus also utilizes a portable main operating unit constructed to fit within a pouch or carrying case worn by the patient. In operation, at least one ultrasonic transducer and at least one electromagnetic coil are activated by transmitting control signals to the placement module from the main operating unit. The activation of the at least one ultrasonic transducer causes ultrasonic waves to be propagated toward the treatment area which are modulated by electrostatic and magnetic forces generated by the at least one electromagnetic coil. The activation of the at least one ultrasonic transducer and the at least one electromagnetic coil may be performed at the same time or at different times for varying periods.